

Title (en)  
SUBSTRATE SUPPORTS FOR SEMICONDUCTOR PROCESSING SYSTEMS

Title (de)  
SUBSTRATTRÄGER FÜR HALBLEITERVERARBEITUNGSSYSTEME

Title (fr)  
SUPPORTS DE SUBSTRAT POUR SYSTÈMES DE TRAITEMENT DE SEMI-CONDUCTEURS

Publication  
**EP 4170062 A1 20230426 (EN)**

Application  
**EP 22203123 A 20221021**

Priority  
US 202163270380 P 20211021

Abstract (en)  
A substrate support includes a disc body with an upper surface and an opposite lower surface arranged along a rotation axis. The upper surface has a circular concave portion extending about the rotation axis, an annular ledge portion extending circumferentially about the concave portion, and an annular rim portion extending circumferentially about the ledge portion connecting to the concave portion of the disc body by the ledge portion of the disc body. The ledge portion slopes downward radially outward from the rotation axis to seat a substrate on the disc body such that a beveled edge of the substrate is cantilevered above the ledge portion of the upper surface of the disc body. Substrate support assemblies, semiconductor processing systems, and film deposition methods are also described.

IPC 8 full level  
**C23C 16/44** (2006.01); **C23C 16/455** (2006.01); **C23C 16/458** (2006.01); **C23C 16/52** (2006.01); **H01L 21/67** (2006.01); **H01L 21/687** (2006.01)

CPC (source: EP KR US)  
**C23C 16/45521** (2013.01 - EP); **C23C 16/45591** (2013.01 - EP); **C23C 16/4581** (2013.01 - EP); **C23C 16/4585** (2013.01 - EP); **C30B 25/12** (2013.01 - KR); **C30B 25/20** (2013.01 - KR); **C30B 29/06** (2013.01 - KR); **H01L 21/02532** (2013.01 - KR); **H01L 21/0262** (2013.01 - KR); **H01L 21/02634** (2013.01 - KR); **H01L 21/67115** (2013.01 - EP); **H01L 21/68735** (2013.01 - EP KR US); **H01L 21/68757** (2013.01 - EP KR); **H01L 21/68764** (2013.01 - US); **H01L 21/68785** (2013.01 - EP KR US); **H01L 21/68742** (2013.01 - EP)

Citation (applicant)  
US 2020040458 A1 20200206 - MA MINGYANG [US], et al

Citation (search report)  
• [XYI] US 2010227455 A1 20100909 - FUJIKAWA TAKASHI [JP], et al  
• [XYI] US 7648579 B2 20100119 - GOODMAN MATT G [US], et al  
• [XI] US 7601224 B2 20091013 - FOREE MICHAEL TODD [US]  
• [XYI] JP 5092975 B2 20121205  
• [Y] JP 6459801 B2 20190130  
• [X] JP 2015095599 A 20150518 - SHARP KK

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

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BA

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DOCDB simple family (publication)  
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